IN THE UNITED STATES PATENT AND TRADEMARK OFFICE PATENT APPLICATION

5 Entitled: A TILTABLY RETRACTABLE THRUSTER

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ABSTRACT OF THE DISCLOSURE

The present invention relates to a retractable 15 thruster for a surface or submersible vessel, the thruster comprising a propulsion assembly comprising a rigid structure secured to a cylindrical turbine, said rigid structure containing or being suitable for containing a motor, said motor being suitable for 20 rotating at least one propeller inside said turbine via at least one rotary shaft between said motor and said propeller, and preferably further comprising a plate for closing the hull placed beneath said turbine and secured thereto, said propulsion assembly being displaceable by 25 displacement means between a retracted position in which it is at rest inside the hull and a deployed position for providing propulsion in which the propeller is immersed beneath the hull. According to the present invention, said displacement means enable said propulsion assembly 30 to be moved between said retracted and deployed positions by said propulsion assembly performing uniform circular movement about an axis of rotation situated substantially at the level of said hull or beneath said hull.

Ree'd PET/PTO 08 SEP 2004

(12) DEMANDE INTERNATIONALE PUBLIÉE EN VERTU DU TRAITÉ DE COOPÉRATION EN MATIÈRE DE BREVETS (PCT)

(19) Organisation Mondiale de la Propriété Intellectuelle

Bureau international



10/507022

(43) Date de la publication internationale 28 octobre 2004 (28.10.2004)

PCT

(10) Numéro de publication internationale WO 2004/092007 A1

- (51) Classification internationale des brevets⁷: B63H 5/125
- (21) Numéro de la demande internationale :

PCT/FR2004/000743

- (22) Date de dépôt international : 25 mars 2004 (25.03.2004)
- (25) Langue de dépôt :

français

(26) Langue de publication :

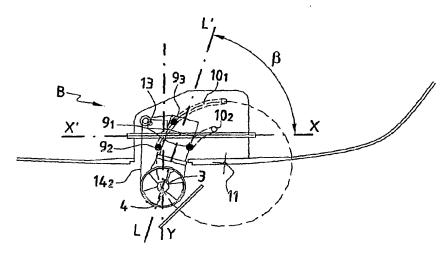
français

- (30) Données relatives à la priorité : .
 03/04375 9 avril 2003 (09.04.2003) FR
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- (81) États désignés (sauf indication contraire, pour tout titre de protection nationale disponible): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GII, GM, IIR, IIU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PII,

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- (54) Title: ROTATIONALLY RETRACTABLE PROPELLER
- (54) Titre: Propulseur retractable par rotation



(57) Abstract: The invention relates to a retractable propeller for a floating device or submergible device comprising a propeller unit (1) consisting of a rigid structure $(2,2_1)$ which is coupled to a cylindrical turbine (4), whereby said rigid structure $(2,2_1)$ contains or can contain a motor, said motor rotationally driving at least one helix (3) inside the turbine (4) with the aid of at least one shaft which rotates between the motor and the helix, and preferably a hull(7) obtrusion plate (6) placed below said turbine and coupled thereto. The propeller unit (1) can be displaced with the aid of displacement means $(91-9_3,10_1-10_2)$ between a retracted rest position (1) inside the hull and a spread-out propulsion position (B) wherein the helix (3) is submerged below the hull (7). According to the invention, said displacement means enable the propeller unit to be displaced between the retracted position (A) and the spread-out position (B) according to a uniform circular movement of said propeller unit (1) in relation to a centre of rotation (11) located essentially at the level of the hull or below said hull.

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